



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,606	03/31/2004	Wang Yuch	42P18695	9672

8791 7590 10/18/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

GILLIAM, BARBARA LEE

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No:

10/815,606

Applicant(s)

WANG YUEH

Examiner

Barbara L. Gilliam

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 21-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/18/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed July 18, 2005 has been received and fully considered.
2. Claims 1-31 are present, of which claim 31 is new.

Election/Restrictions

3. Claims 1-15 and 21-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 18, 2005.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 16-17, 20 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Okino et al. (US 6,303,266 B1).
 - a. In Okino et al. a resist, having a specific bridged-bond containing aliphatic ring, is obtainable by polymerizing or condensing starting monomers in

Art Unit: 1752

one of four combinations. In resist combinations iii) and iv), the resin is preferably obtained by polymerizing a compound represented by general formulas (I-1) or (I-2) and a monomer is combined with this backbone through linkage decomposable by an acid. Examples of this linkage include acid anhydride (column 11, line 47 - column 14, line 50). Photoacid generators useful for the resist compositions are used in an amount from 0.001 to 50 % by weight of the total amount of the other solid components (column 23, line 12 - column 30, line 5). In the pattern forming process, the resist composition is dissolved, coated onto a substrate, dried, exposed to actinic radiation, baked and developed (column 34, line 45 - column 35, line 28).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. (US 6,303,266 B1).

a. As outlined in the rejection under 35 USC 102(b) above, Okino et al. teach a resist having a specific bridged-bond containing aliphatic ring which is obtainable by polymerizing or condensing starting monomers in one of four combinations. In resist combinations iii) and iv), the resin is preferably obtained

Art Unit: 1752

by polymerizing a compound represented by general formulas (I-1) or (I-2) and a monomer is combined with this backbone through linkage decomposable by an acid. Examples of this linkage include acid anhydride (column 11, line 47 - column 14, line 50). Based on Okino's teachings generic anyhydride linkages, the Examiner asserts it would have been obvious to one of ordinary skill in the chemical resist art to attach the acid decomposable monomer to the resin backbone through any anhydride linkage include anhydride linkages that comprise sulfur or phosphorous with an expectation of improving the dissolution contrast between exposed and unexposed areas (column 13, line 64 - column 14, line 5).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. In US 6,849,381 B1, Barclay et al. teach polymers and photoresist compositions that comprise polymers as a resin binder component (abstract).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

Art Unit: 1752

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barbara L. Gilliam

Barbara L. Gilliam
Primary Examiner
Art Unit 1752

bg
October 16, 2005